

## EZ-LIGHT™ 2- or 3-Color General-Purpose Indicators



## Datasheet

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see [www.bannerengineering.com](http://www.bannerengineering.com).

| Models <sup>1</sup>                                                                 |           |           | LED Colors — 2 or 3 Lights,<br>Independently Selected <sup>2</sup> |         |         | Construction                                                                                           |
|-------------------------------------------------------------------------------------|-----------|-----------|--------------------------------------------------------------------|---------|---------|--------------------------------------------------------------------------------------------------------|
|                                                                                     | PNP Input | NPN Input | Color 1                                                            | Color 2 | Color 3 |                                                                                                        |
|    | T8LGRXPQP | T8LGRXNQP | Green                                                              | Red     | —       | Polycarbonate/ABS alloy housing, thermoplastic diffuser<br>IP67                                        |
|                                                                                     | T8LGXYPQP | T8LGXYNQP | Green                                                              | —       | Yellow  |                                                                                                        |
|                                                                                     | T8LXRYQP  | T8LXRYNQP | —                                                                  | Red     | Yellow  |                                                                                                        |
|    | M18GRXPQ  | M18GRXNQ  | Green                                                              | Red     | —       | Nickel-plated brass housing, thermoplastic diffuser<br>Fully encapsulated<br>IP67                      |
|                                                                                     | M18GXPQ   | M18GXNQ   | Green                                                              | —       | Yellow  |                                                                                                        |
|                                                                                     | M18XYPQ   | M18XRYNQ  | —                                                                  | Red     | Yellow  |                                                                                                        |
|                                                                                     | M18GRYPQ  | M18GRYNQ  | Green                                                              | Red     | Yellow  |                                                                                                        |
|   | T18GRXPQ  | T18GRXNQ  | Green                                                              | Red     | —       | Thermoplastic polyester housing, thermoplastic diffuser<br>Fully encapsulated<br>IP67                  |
|                                                                                     | T18GXPQ   | T18GXNQ   | Green                                                              | —       | Yellow  |                                                                                                        |
|                                                                                     | T18XYPQ   | T18XRYNQ  | —                                                                  | Red     | Yellow  |                                                                                                        |
|                                                                                     | T18GRYPQ  | T18GRYNQ  | Green                                                              | Red     | Yellow  |                                                                                                        |
|  | T30GRXPQ  | T30GRXNQ  | Green                                                              | Red     | —       | Thermoplastic polyester housing, thermoplastic diffuser<br>Fully encapsulated<br>IP67                  |
|                                                                                     | T30GXPQ   | T30GXNQ   | Green                                                              | —       | Yellow  |                                                                                                        |
|                                                                                     | T30XYPQ   | T30XRYNQ  | —                                                                  | Red     | Yellow  |                                                                                                        |
|                                                                                     | T30GRYPQ  | T30GRYNQ  | Green                                                              | Red     | Yellow  |                                                                                                        |
|  | K30LGRXPQ | K30LGRXNQ | Green                                                              | Red     | —       | 22 mm threaded polycarbonate base, translucent polycarbonate dome<br>Fully encapsulated<br>IP67, IP69K |
|                                                                                     | K30LGXPQ  | K30LGXNQ  | Green                                                              | —       | Yellow  |                                                                                                        |
|                                                                                     | K30LXYPQ  | K30LXRYNQ | —                                                                  | Red     | Yellow  |                                                                                                        |
|                                                                                     | K30LGRYPQ | K30LGRYNQ | Green                                                              | Red     | Yellow  |                                                                                                        |



Note: More models on next page.

<sup>1</sup>

- T8L Models: Standard pigtail QD models are listed. For integral 4-wire cable model, omit suffix QP. For example, T8LGRXP.
- K30L Models: Standard 4-pin M12/Euro-style QD connector models are listed. For 2 m (6.5') integral 4-wire cable model, omit suffix Q. For example, K30LGRXP. For 150mm (6") PVC cable with 4-pin M12/Euro-style connector, replace suffix Q with QP. For example, K30LGRXPQP. For terminal model, replace suffix Q with T. For example, K30LGRXPT.
- K80L Models: Standard 4-pin M12/Euro-style integral QD connector models are listed. For terminal-wired model, omit suffix Q. For example, K80LGRXP.
- Other Models: Standard 4-pin M12/Euro-style integral QD connector models are listed. For 2 m (6.5') integral 4-wire cable model, omit suffix Q. For example, M18GRXP. For 150 mm (6") PVC cable with 4-pin M12/Euro-style connector, replace suffix Q with QP. For example, M18GRXPQP.
- Models with a quick disconnect require a mating cordset.

<sup>2</sup>

Contact Banner Engineering for other colors and color combinations.



| Models <sup>1</sup>                                                               |            |            | LED Colors — 2 or 3 Lights,<br>Independently Selected <sup>2</sup> |         |         | Construction                                                                                     |
|-----------------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------|---------|---------|--------------------------------------------------------------------------------------------------|
|                                                                                   | PNP Input  | NPN Input  | Color 1                                                            | Color 2 | Color 3 |                                                                                                  |
|  | K50LGRXPQ  | K50LGRXNQ  | Green                                                              | Red     | —       | 30 mm polycarbonate base,<br>translucent polycarbonate dome<br>Fully encapsulated<br>IP67, IP69K |
|                                                                                   | K50LGXYPQ  | K50LGXYNQ  | Green                                                              | —       | Yellow  |                                                                                                  |
|                                                                                   | K50LXRYQP  | K50LXRYNQ  | —                                                                  | Red     | Yellow  |                                                                                                  |
|                                                                                   | K50LGRYPQ  | K50LGRYNQ  | Green                                                              | Red     | Yellow  |                                                                                                  |
|  | K50FLGRXPQ | K50FLGRXNQ | Green                                                              | Red     | —       | ABS base, translucent<br>polycarbonate dome<br>Fully encapsulated<br>IP67, IP69K                 |
|                                                                                   | K50FLGXYPQ | K50FLGXYNQ | Green                                                              | —       | Yellow  |                                                                                                  |
|                                                                                   | K50FLXRYQP | K50FLXRYNQ | —                                                                  | Red     | Yellow  |                                                                                                  |
|                                                                                   | K50FLGRYPQ | K50FLGRYNQ | Green                                                              | Red     | Yellow  |                                                                                                  |
|  | K80LGRXPQ  | K80LGRXNQ  | Green                                                              | Red     | —       | Polycarbonate base, translucent<br>polycarbonate dome<br>Electronics fully encapsulated<br>IP67  |
|                                                                                   | K80LGXYPQ  | K80LGXYNQ  | Green                                                              | —       | Yellow  |                                                                                                  |
|                                                                                   | K80LXRYQP  | K80LXRYNQ  | —                                                                  | Red     | Yellow  |                                                                                                  |
|                                                                                   | K80LGRYPQ  | K80LGRYNQ  | Green                                                              | Red     | Yellow  |                                                                                                  |

## Specifications

### Supply Voltage and Current

T8L models: 10 V dc to 30 V dc at 20 mA maximum  
 T18, M18, and K30L models: 10 V dc to 30 V dc at 25 mA maximum per LED color  
 T30 models: 10 V dc to 30 V dc at 40 mA maximum per LED color  
 K50L, K50FL, and K80L models: 18 V dc to 30 V dc at 40 mA maximum per LED color

### Indicators

Entire translucent diffuser or dome provides indication. Green and yellow, when connected to discrete output of 3-wire or 4-wire sensors. For other colors, contact factory for availability.

### Input Response Time

Indicator ON/OFF: 1 ms max.

### Environmental Rating

Rated IEC IP67. T8L not encapsulated; K80L has encapsulated electronics only; other models fully encapsulated.  
 K30L, K50L, and K50FL QD models meet IP69K, per DIN 40050-9.  
 Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

### Operating Conditions

Temperature: -40 °C to +50 °C (-40 °F to +122 °F)

### Certifications



K30L and K50L models only:

### Connections

T8L models: 4-pin M12/Euro-style 150 mm (6 in) PVC cable with QD (QP) or 4-wire, 2 m (6.5 ft) integral cable, depending on model  
 K30L models: 4-pin M12/Euro-style QD (Q), 150mm (6") PVC cable with QD (QP), 4-wire, 2 m (6.5 ft) integral cable, or 5 color-coded screw terminal for up to 16 AWG wire, depending on model. Screw terminal max torque: 0.11N-m (1.0lbf-in).  
 K80L models: 4-pin M12/Euro-style integral QD (Q) standard; terminal-wired models available for use with bulk cable; compression fitting optional. Contact Factory for cable information.  
 Other models: 4-pin /M12/Euro-style integral QD (Q), 150 mm (6 in) PVC cable with QD (QP), or 4-wire, 2 m (6.5 ft) integral cable, depending on model

### Construction

See Models lists

### Required Overcurrent Protection



**WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

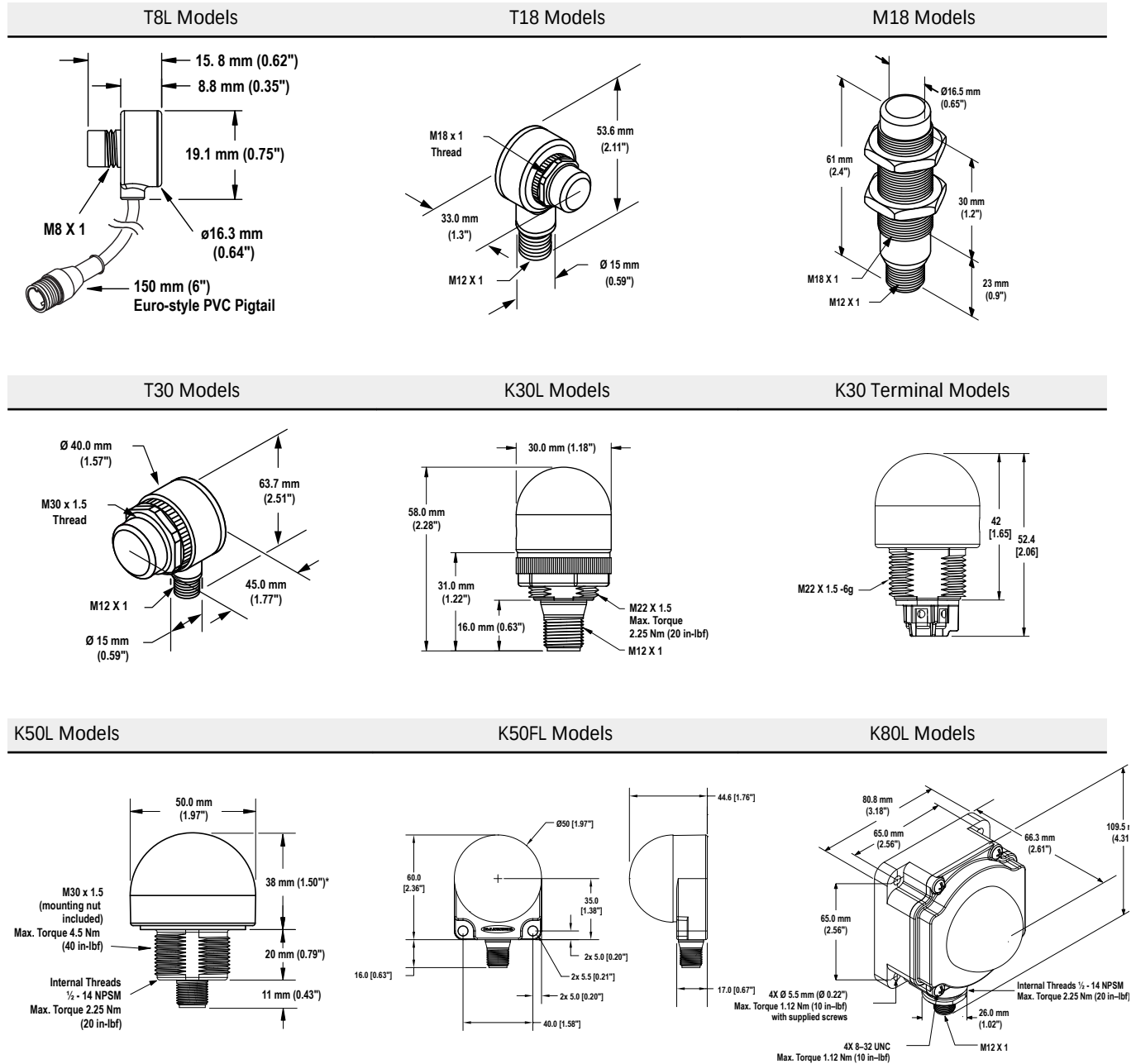
Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to [www.bannerengineering.com](http://www.bannerengineering.com).

| Supply Wiring (AWG) | Required Overcurrent Protection (Amps) |
|---------------------|----------------------------------------|
| 20                  | 5.0                                    |
| 22                  | 3.0                                    |
| 24                  | 2.0                                    |
| 26                  | 1.0                                    |
| 28                  | 0.8                                    |
| 30                  | 0.5                                    |

# EZ-LIGHT™ 2- or 3-Color General-Purpose Indicators

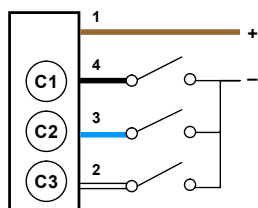
## Dimensions



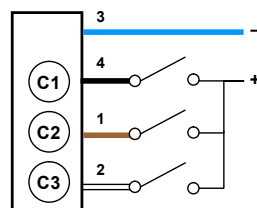
## Wiring Diagrams

### Multi Color Wiring

NPN



PNP



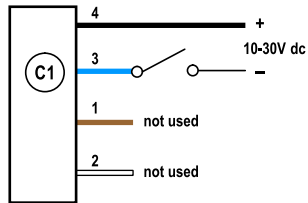
1 = Brown  
2 = White  
3 = Blue  
4 = Black  
5 = Gray

C1 = Color 1  
C2 = Color 2  
C3 = Color 3

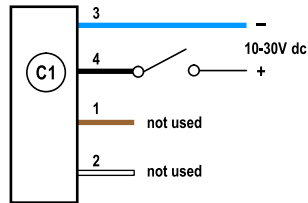
Gray Wire not used in K30 Terminal models

## Single Color Wiring

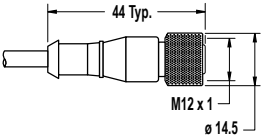
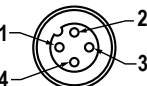
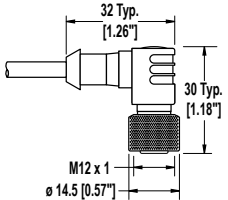
NPN



PNP



## Accessories

| 4-Pin Threaded M12/Euro-Style Cordsets |                |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
|----------------------------------------|----------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                  | Length         | Style       | Dimensions                                                                                                                                                                                                                      | Pinout (Female)                                                                                                                            |
| MQDC-406                               | 1.83 m (6 ft)  | Straight    |                                                                                                                                               | <br><br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| MQDC-415                               | 4.57 m (15 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
| MQDC-430                               | 9.14 m (30 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
| MQDC-450                               | 15.2 m (50 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
| MQDC-406RA                             | 1.83 m (6 ft)  | Right-Angle |  |                                                                                                                                            |
| MQDC-415RA                             | 4.57 m (15 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
| MQDC-430RA                             | 9.14 m (30 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |
| MQDC-450RA                             | 15.2 m (50 ft) |             |                                                                                                                                                                                                                                 |                                                                                                                                            |

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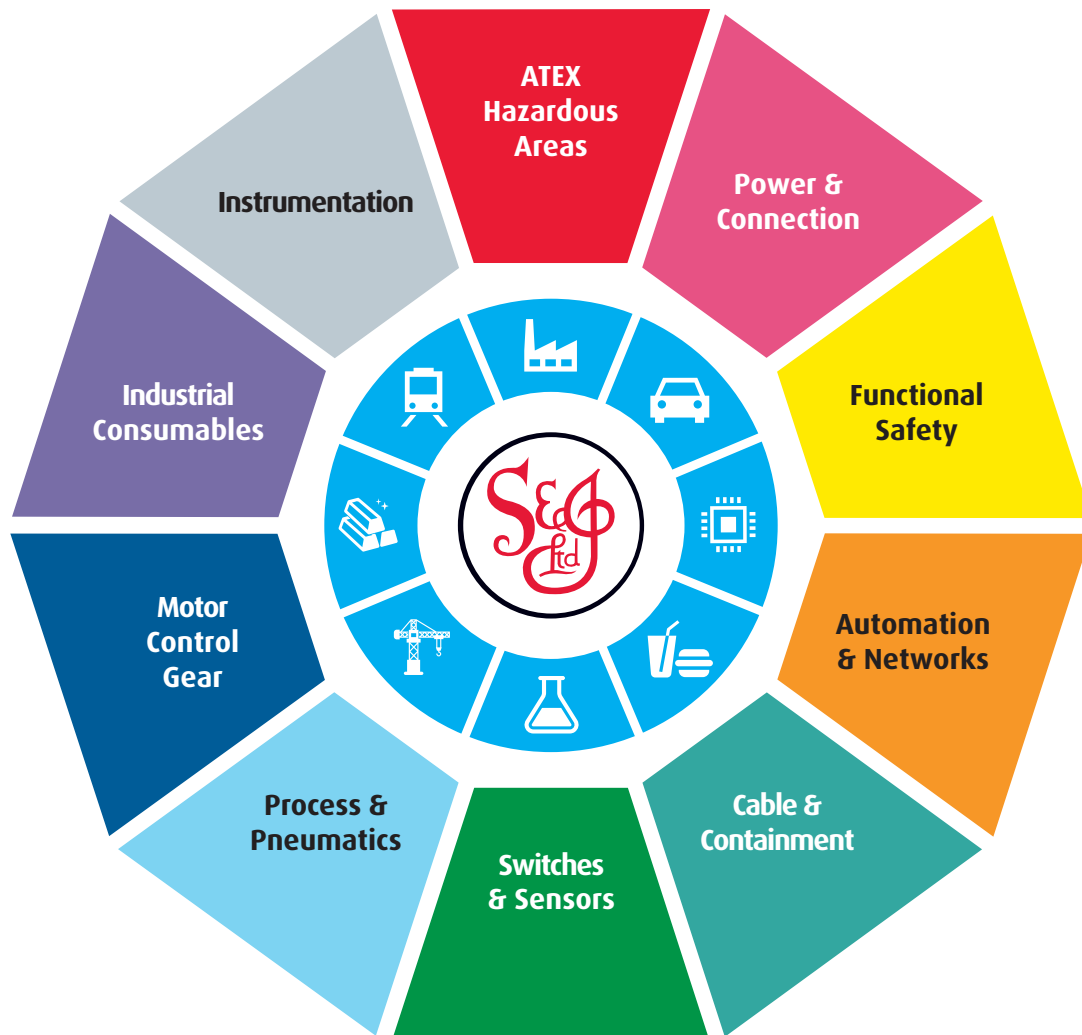
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